

**MONOCLONAL ANTIBODY TO
HUMAN S100A8/A9 (MRP-8/MRP-14), CALPROTECTIN
clone 27E10**



Catalog nr	HM2156 (lot number and expiry date are indicated on the label)										
Description	<p>The monoclonal antibody 27E10 is a unique antibody recognising an epitope on the S100A8/A9 heterocomplex that is not exposed on the individual subunits S100A8 (MRP8) or S100A9 (MRP14). The calcium-binding, migration inhibitory factor-related proteins, MRP-8 (S100A8) and MRP-14 (S100A9) belong to the S100 protein family. The expression of these proteins is largely confined to the cytosol of neutrophils and monocytes. The complex formation of these proteins is a calcium-dependent process. The S100A8/A9 heterocomplex, also called MRP-8/MRP-14 complex or calprotectin, comprises 60% of the cytoplasmic protein fraction of circulating polymorphonuclear granulocytes and is also found in monocytes, macrophages and ileal tissue eosinophils. Peripheral blood monocytes carry the antigen extra- and intracellularly, neutrophils only intracellularly. The S100A8/A9 complex has antibacterial, antifungal and immunomodulating and antiproliferative effects. Besides this it is a potent chemotactic factor for neutrophils. Plasma concentrations are elevated in diseases associated with increased neutrophil activity. Granulocytes terminate their existence after transmigration through the intestinal wall. Therefore calprotectin is also detectable in faeces.</p> <p>The monoclonal antibody 27E10 can be used for early detection of inflammatory macrophages, for the characterisation of tumorous tissues and the monitoring of peripheral blood cell cultures. The antibody 27E10 does not react with lymphocytes or platelets. 27E10 shows cross-reaction with a subpopulation of macrophages of rhesus monkey.</p>										
Species	Mouse IgG ₁										
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.										
Application	The monoclonal antibody 27E10 can be used for immuno assays both as coating and as detector, Western blotting, immuno precipitation and flow cytometry. Furthermore the antibody 27E10 is useful for immunohistology on frozen and paraffin sections.										
Use	For immunohistology, flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.										
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.										
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.										
References	<ol style="list-style-type: none">1. Zwadlo, G et al; A monoclonal antibody to a subset of human monocytes found only in the peripheral blood and inflammatory tissues. <i>J Immunol</i> 1986, <i>137</i>: 5122. Kuhn, A et al; Upregulation of epidermal surface molecule expression in primary and ultraviolet-induced lesions of lupus erythematosus tumidus. <i>Br J Dermatol</i> 2002, <i>146</i>: 8013. Hessian, P et al; The heterodimeric complex of MRP-8 (S100A8) and MRP-14 (S100A9) – Antibody recognition, epitope definition and the implications for structure. <i>Eur J Biochem</i> 2001, <i>268</i>: 353										
Also available	<table><tr><td>HM2134</td><td>Monoclonal antibody against Human TfR1, clone 3B8 2A1</td></tr><tr><td>HM2135</td><td>Monoclonal antibody against Human TfR2, clone 9F8 1C11</td></tr><tr><td>HM2158</td><td>Monoclonal antibody against Human Macrophages, clone 25F9</td></tr><tr><td>HP9034</td><td>Polyclonal antibody against Human Lactoferrin</td></tr><tr><td>HP9035</td><td>Polyclonal antibody against Human Lysozyme</td></tr></table>	HM2134	Monoclonal antibody against Human TfR1, clone 3B8 2A1	HM2135	Monoclonal antibody against Human TfR2, clone 9F8 1C11	HM2158	Monoclonal antibody against Human Macrophages, clone 25F9	HP9034	Polyclonal antibody against Human Lactoferrin	HP9035	Polyclonal antibody against Human Lysozyme
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